

Applicant: Rajasekhar Bandaru

Title: 68730 and 69112, Protein Kinase Molecules and Uses

Therefor

USN: 10/024,036

Filed: December 17, 2001

Attorney/Agent: Jean M. Silveri

Docket No.: MPI2000-521PIRM

Sheet 1 of 8 Sheets

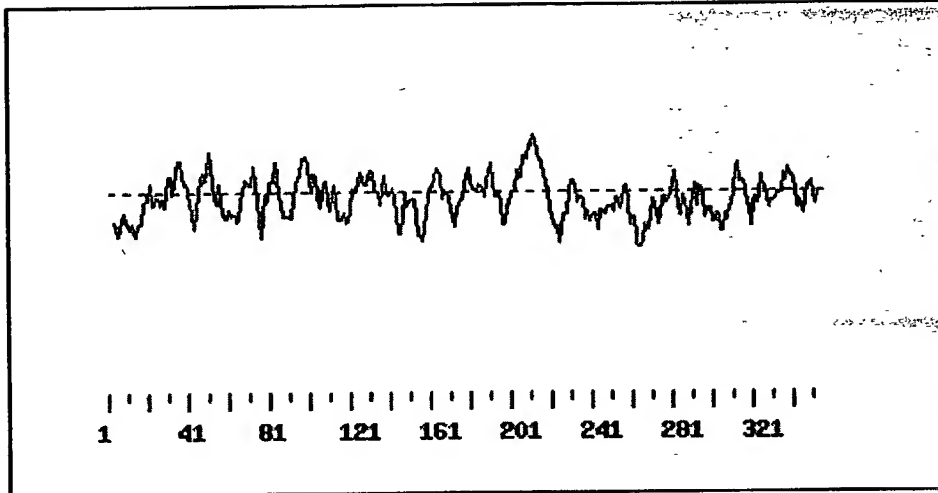


FIGURE 1

Applicant: Rajasekhar Bandaru

Title: 68730 and 69112, Protein Kinase Molecules and Uses

Therefor

USSN: 10/10036

Filed: December 17, 2001

Attorney/Agent: Jean M. Silveri

Docket No.: MP12000-521P1RM

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10024035.070502

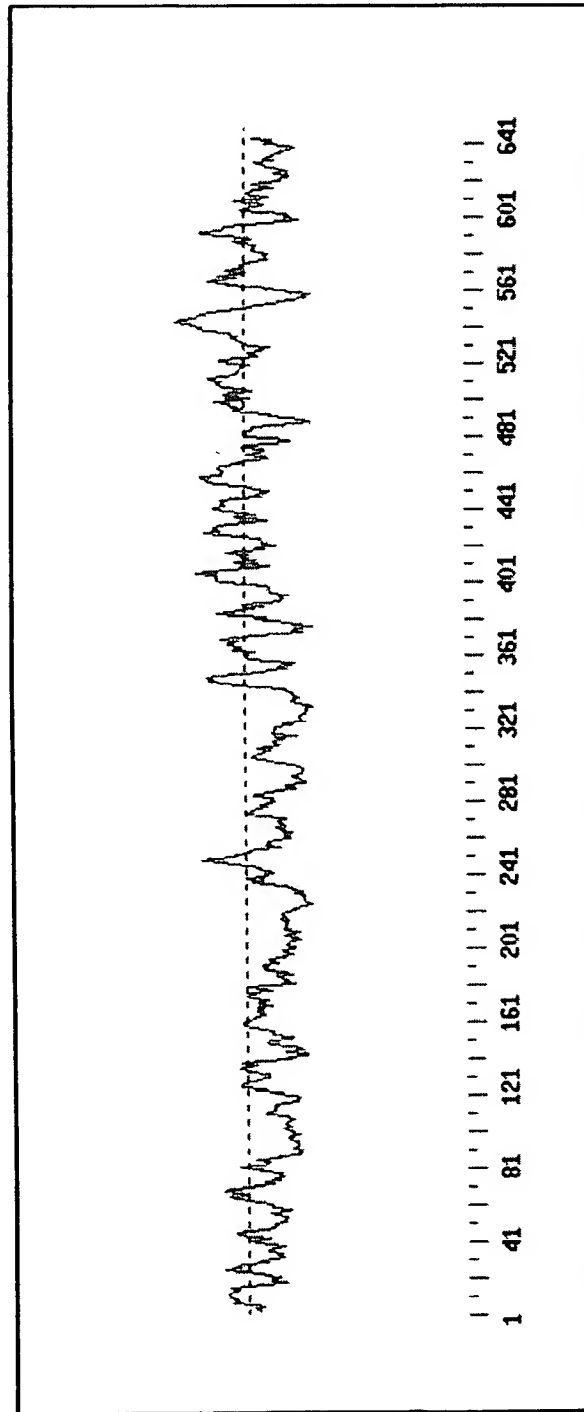


FIGURE 2

SECRET
NOFORN
NOEYES

Applicant: Rajasekhar Bandaru
 Title: 68730 and 69112, Protein Kinase Molecules and Uses
 Therefor
 US 10/024,636 Filed: December 17, 2001
 Attorney/Agent: Jean M. Silveri
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pkinese: domain 1 of 1, from 23 to 279: score 346.3, E = 3.4e-100

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*->yelleklGeGsfgkVykakhk.tgkivAvKilkkesls.....lrE
+e++e+lG G+f++V +a++k tgk++AvK+++k+ l+++++ +E
68730 23 FEFKETLGTGAFSEVVLAE EKATGKLFAVKCIPKKALKgkessiENE 69
      ↑                ↑
      iqilkrIsHpNIvrllgvfedtdhlylvmEymegGdLfdylrrngplse
      i++l++++H+Niv l +++e +++hlylvm+++ gG+Lfd++++g ++e
68730 70 IAVLRKIKHENIVALEDIYE-SPNHLYLVMQLVSGGELFDRIVEKGFYTE 118
      ↑                ↑                ↑                ↑
      keakkialQilrGleYlHsngivHRDLKpeNIllden...gtvKiaDFGL
      k+a +++Q+l ++ YLH++givHRDLKpeN+L +++++ ++ i+DFGL
68730 119 KDASTLIRQVLDAVYYLHRMGIVHRDLKPENLLYYSQdeesKIMISDFGL 168
      ↑                ↑                ↑                ↑
      Arll...ekl ttfvGTpwYmmAPEvilegrgysskvDvWSlGviLyEllt
      ++ +++ ++t +GTp+Y+ APEv l +++ys++vD WS+Gvi y ll+
68730 169 SKMEgkgDVMSTACGTPGYV-APEV-LAQKPYSKAVDCWSIGVIAYILLC 216
      ggplfpgadlpaftggdevdqliifvklPfsdelpktridpleelfrik
      g +Pf+d ++ ++lf+ +
68730 217 G-----YPPFYD-----ENDSKLFEQI 233
      kr.....rlplpsncSeelkdLlkkcLnkDPskRpGsatakeilnhpwf<
      ++ + + +p ++ +S+++kd+++ + +kDP+kR+ t++++ hpw+
68730 234 LKaeyefDSPYWDDISDSAKDFIRNLMEKDPNKRY---TCEQAARHPWI 279
  
```

-*

FIGURE 3A

Applicant: Rajasekhar Dandam

Title: 68730 and 69112, Protein Kinase Molecules and Uses Therefor

USPTO: 10/024,036

Filed: December 17, 2001

Attorney/Agent: Jean M. Silveri

Docket No.: MPI2000-521P1RM

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serkin_6: domain 1 of 1, from 23 to 279: score 386.6, E = 2.5e-112
*->Yellkk1GkGaFGkVylardkktgrlvAiKvik.....erilrE
+e+ ++lG GaF++V la +k tg+l+A+K+i+++ +++++ +i++E
68730 23 FEFKETLGTFGAFSEVVLAEKATGKLFAVKCIPkkalkgkeSSIENE 69
ikiLkk.dHPNIVkLydvfed.dklylVmEyceGdlGdLfdllkkrgrg
i++L+k +H+NIV L d++e++++lylVm +++G G+Lfd+++++g
68730 70 IAVLRKiKHENIVALEDIYESpNHLYLVMQLVSG--GELFDRIVEKGF-- 115
lrkvlsE.earfyfrQilsaLeYLHsqgIiHRDLKPeNiLLds.....hv
++E++a ++rQ+l+a+ YLH++gI+HRDLKPeN+L s+++++ +
68730 116 ---YTEkDASTLIRQVLDVYYLHRMGIVHRDLKPENLLYYSqdeesKI 161
KlaDFG1Arql.....ttfvGTpeYmAPEvl...gYgkpavDiWSlGci
+++DFG1++ +++++ +t +GTp Y+APEvl +++Y+k avD WS+G+i
68730 162 MISDFGLSKMEgkgdvmSTACGTPGYVAPEVLaqkPYSK-AVDCWSIGVI 210
lyElltGkpPFp..qldlifkkig.....SpeakdLikklL
y+ll+G+pPF+++++ ++f++i++ +++ ++++++ S++akd+i++l+
68730 211 AYILLCGYPPFYdeNDSKLFELkaeyefdsywddiSDSAKDFIRNLM 260
vkdPekRlta.eaLedeldikaHPff<-*
+kdP+kR+t++++a + HP++
68730 261 EKDPNKRYTCeQAAR-----HPWI 279

FIGURE 3B

tyrkin_6: domain 1 of 1, from 23 to 279: score 35.7, E = 4e-14
*->ltlgkkLGeGaFGeVykGtlk...ieVAVKtLkeda....keeFlrE
++++LG GaF eV++++ k ++ AVK++ + a +++ + +E
68730 23 FEFKETLGTFGAFSEVVLAEEKatgKLFVAVKCIPKKAlkgkESSIENE 69
akiMkklGgkHpNiVklLlGvcteeerrFmevePlmivmEymegGdLldyL
+ +++k+ kH+NiV+L + ++ l++vm +++gG L d++
68730 70 IAVLRKI--KHENIVALEDIYESP-----NHLYLVMQLVSGGELFDRI 110
rknrpklslsdLlsfAlQIAkGMeYLesknfvHRDLAARNcLvgenk...
++ + +d Q+ + YL++++vHRDL N L+ ++ ++
68730 111 -VEKGFYTEKDASTLIROVLDAVYYLHRMGIVHRDLKPENLLYYSQDees 159
vvKIsDFGLsRdlyddDkkGeskyYrkkggkggktllPirWmAPESlkd
+ IsDFGLs+ + + d+ +++ g+ + APE+l
68730 160 KIMISDFGLSKMEGKG-----DVMSTAC--GTPG-----YVAPEVLAQ 195
gkFtskSDVWSFGVlLWEiftlGeqPYpgeiqqfmsneevleylkkGyRl
+ ++ + D WS GV + i+ G +P ++ +++ ++e++ k ++
68730 196 KPYSKAVDCWSIGVIAY-ILLCGYPPFYD-----ENDSKLFEQILKAEYE 239
pkPendlpisS....vtCPdelydlMlqCwaedPedRPtFsel..verl<
++ ++ + + d + +lM++ dP++R t ++ ++ +
68730 240 FDSPY-----WddisDSAKDFIRNLMEK----DPNKRYTCEQAarHPWI 279

FIGURE 3C

Applicant: Rajasena Bandula

Title: 38730 and 69112, Protein Kinase Molecules and Uses 4036, 0370502
Therefor

USPN: 10/024,056

Filed: December 17, 2001

Attorney/Agent: J. M. Silveri

Docket No.: MPI2000-521PIRM

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pkinese: domain 1 of 1, from 356 to 613: score 350.2, E = 2.3e-101
*->yelleklGeGsfgGkVykakhk.tgkivAvKilkkesls.....lrE
ye+++++G G+f++V++++h++t + +A+Ki++k++l+++++ +E
69112 356 YETGRVIGDGNFAVVKECRHReTRQAYAMKIIDKSRLKgedmvdSE 402

iqilkrIsHpNivrlIlgvfedtdhhlylvmEymegGdLfdylrrngplse
i i ++lsHpNiv+l++v+e td ++yl++Ey+ gGdLfd ++++++e
69112 403 ILIIQSLSHPNIVKLHEVYE-TDMEIYLILEYVQGGDLFDAIIESVKFPE 451

keakkialQilrGleYlHsngivHRDLKpeNIllden....gtvKiaDFG
++a ++ +++++l ++H+++ivHRDLKpeN+L+ +n++++ t+K+aDFG
69112 452 PDAALMIMDLCKALVHMHDKSIVHRDLKPENLLVQRNedksTTLKLADFG 501
↑ ↑
LArlI.eklttfvGTpwYmmAPEvilegrgysskvDvWSlGviLyElltg
LA+ + + t++GTp+Y+ APE+ l+ +gy+ +vD+W+ GviLy ll+g
69112 502 LAKHVvRPIFTVCGTPTYV-APEI-LSEKGYGLEVDMWAAGVILYILLCG 549

gplfpgadlpafgtggdevdqliifvklPfsdelpktridpleelfrikk
+Pf+ ++ +elf+i++
69112 550 -----FPPFRS-----PERDQDELFNIIQ 568

r.....rlplpsncSeelkdLlkkcLnkDPskRpGsatakeilnhpwf<-
++ + ++p ++n+S+++kdL++++L +DP+kR+ ta+++l+hpw+
69112 569 LghfefLPPYWDNISDAADLVSRLLVVDPPKKRY---TAHQVLQHPWI 613

*

FIGURE 4A

Applicant: Rajasekhar Dandaru

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USN: 10/024,036

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Attorney/Agent: Jon M. Silveri

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serkin_6: domain 1 of 1, from 356 to 613: score 372.7, E = 3.8e-108
*->YellkkkIGkGaFGkVylardkktgrlvAiKvik.....erilrE
Ye ++++G G F++V+ +r+++t + +A+K+i++++ ++++++ +E
69112 356 YETGRVIGDGNFAVVKECRHRETRQAYAMKIIDksrlkgkeDMVDSE 402

ikiLkk.dHPNIVkLydvfed.dklylVmEyceGdlGdLfdllkkrgrg
i i ++ HPNIVkL++v+++ ++yl++Ey+ G GdLfd + + +
69112 403 ILIIQSLSHPNIVKLHEVYETdMEIYLILEYVQG--GDLFDAIESVK-- 448

lrkvlse.earfyfrQilsaLeYLHsqgIiHRDLKPeNiLLds.....h
++E++a+ ++ +aaL ++H++ I+HRDLKPeN+L+ ++++++
69112 449 ----FPEpDAALMIMDLCKALVHMDKSIHRDLKPeNLLVQRnedkstT 494

vKlaDFGLArql....ttfvGTpeYmAPEvl...gYgkpavDiWSlGcil
+KlaDFGLA+++ ++ t++GTP Y+APE+l+++gYg +vD+W+ G+il
69112 495 LKLADFGlAKHVvrpiFTVCGTPTYVAPEILsekGYGL-EVDMWAAGVIL 543

yElltGkpPFp....qldlifkkig.....SpeakdLikk1
y+ll+G pPF+++++++d++f++i ++ + +++++ S+ akdL+++l
69112 544 YILLCGFPPFRsperDQDELfNIQlghfelfppywdniSDAAKDLVSRL 593

LvkdPekRlta.eaLedeldikaHPff<-*
Lv+dP+kR+ta+++L+ HP++
69112 594 LVVDPKKRYTAhQVLQ-----HPWI 613

FIGURE 4B

Applicant: Rajasekhar Bangaru

Title: 68730 and 69112, Protein Kinase Molecules and Uses

Therefor

U.S. Pat. No. 6,036

Filed: December 17, 2001

Attorney/Agent: John M. Silveri

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tyrkin_6: domain 1 of 1, from 356 to 613: score 50.0, E = 5.3e-15
*->ltlgkkLGeGaFGeVykgTlk...ieVAVKtLkeda...keeFlrE
+ g+++G G+F +V +++ +++++ A K + ++ +++++ + +E
69112 356 YETGRVIGDGNFAVVKECRHRetrQAYAMKIIDKSRIkgkEDMVDSE 402

akiMkklGgkHpNiVklLgVcteegrrFmevePlmivmEymegGdLldyL
+ i +l +HpNiVkl+ v ++ +++++Ey+ gGdL d +
69112 403 ILIIQSL--SHPNIVKLHEVYETD-----MEIYLILEYVQGGDLFDAI 443

rknrpklsIsdLlsfAlQIAkGMeYLesknfvHRDLAARNcLvgenk...
++ + ++ +d + + +k + ++k +vHRDL N Lv +n +++
69112 444 IESVK-FPEPDAALMIMDLCKALVHMHDKSIVHRDLKPENLLVQRNEdks 492

.vvKIsDFGLsRdlyddDkkGeskdYrkkggkggktllPirWmAPESlk
++ K +DFGL++ + ++ +g APE l
69112 493 tTLKLADFGGLAKHVVRP-----IFTV----CGTP----TYVAPEILS 526

dgkFtskSDVWSFGVlLWEiftlGeqPYpgeiqqfmsneevleylkkGyR
++ + + D W+ GV L+ i+ G +P ++ + +e+++ ++ G+
69112 527 EKGYLEVDMWAAGVILY-ILLCGFPPFRSPPE---RDQDELFNIIQLGHF 572

lpkPendlpiSsvtCPdelydlMlqCwaedPedRPtFsel..verl<-*
P++ +d+ dl ++ dP++R t ++ ++ +
69112 573 EFLPPY-----WDNISDAAKDLVSRLLVVDPKKRYTAHQVlqHPWI 613

FIGURE 4C